

## **Notional Framework for Regulation of SSSB Dismantlement and Disposal**

### **Summary of the NRC Decommissioning Process for Materials Licensees**

*If the SSSB were a radiological support vessel owned by an entity licensed by the NRC, the licensee would be required to notify the NRC within 60 days upon either the expiration of the license, a decision by the licensee to cease operations, or a period of inactivity of 24 months. Within 12 months of this notification, the licensee would be required to submit a Decommissioning Plan (DP).*

*The DP review process begins with an acceptance review. The objective of the acceptance review is to verify that the application contains sufficient information before the staff begins an in-depth technical review. At the conclusion of the acceptance review, the DP will either be accepted for detailed technical review or rejected and returned to the licensee with the deficiencies identified. For DPs proposing unrestricted release a full technical review will be performed in accordance with Subpart E of 10 CFR Part 20, "Standards for Protection Against Radiation." The results of the staff's review will be documented in an Environmental Assessment (EA), or Environmental Impact Statement (EIS) if a Finding of No Significant Impact cannot be made, and a Safety Evaluation Report (SER). If an EA or EIS is prepared, the EA or EIS will be shared with the appropriate State, and State comments will be considered in finalizing the EA or EIS. The final EA or EIS must be summarized in the Federal Register.*

*Following publication of the EA or EIS, a license amendment will be issued approving the DP.*

*Following approval of the DP, the licensee must complete decommissioning in accordance with the approved DP within 24 months or apply for an alternate schedule. NRC staff will inspect the licensee and receive reports during decommissioning operations to ensure compliance with the DP. These inspections will normally include in-process and confirmatory radiological surveys.*

*As the final step in decommissioning, the licensee is required to*

- Certify the disposition of all licensed material, including accumulated wastes, by submitting a completed NRC Form 314 or equivalent information; and*
- Conduct a radiation survey of the premises where licensed activities were carried out (in accordance with the procedures in the approved DP) and submit a report of the results of the survey, unless the licensee demonstrates in some other manner that the premises are suitable for release in accordance with the Subpart E of 10 CFR Part 20.;*
- Properly dispose of licensed material;*
- Make reasonable effort to eliminate residual radioactive contamination, if present;*
- Ensure the site meets the approved DP; and*
- Perform a radiation survey or demonstrate that the premises are suitable for release in accordance with the Subpart E of 10 CFR Part 20.*

*If the licensee were to propose to transfer the license to a decommissioning company or other entity, the licensee would submit an application for license transfer pursuant to 10 CFR 30.34, "Terms and Conditions of Licenses". Such an application would have much of the same information as a Decommissioning Plan, along with additional information on the qualifications of the decommissioning company and the financial assurances that the decommissioning process would be completed by the decommissioning company wishing to assume the license. The results of the NRC staff's review would be documented in a Safety Evaluation Report (SER). Upon satisfactory completion of this review, the NRC could approve transfer of the license to the decommissioning company, together with any necessary modifications to the license.*

*The NRC could elect to review a DP and License Transfer Request in parallel in a case where an approved DP did not already exist.*

*In some cases, the NRC oversees decommissioning of sites that do not have a current NRC license at the initiation of decommissioning activities, but the NRC has jurisdiction over the byproduct material at the site. In such cases there are no existing licensing bases in areas such as security, emergency preparedness, fire protection, quality assurance, environmental monitoring, radiation safety, and ALARA that would comply with NRC requirements. Instead of a Decommissioning Plan, the NRC requires a Decommissioning Work Plan be provided for NRC review and approval. The NRC documents its findings in a Technical Evaluation Report, instead of a Safety Evaluation Report. The Decommissioning Work Plan incorporates all of the above listed topics as well as the Decommissioning Plan items discussed in NUREG 1757. The NRC has been successful with this process at a number of unlicensed sites where the NRC has jurisdiction, including AAR Manufacturing, Kaiser Aluminum, and Breckenridge,*

## Notional Application of the NRC Process for the SSSB

Since the SSSB is not an NRC- licensed radiological vessel, the following outline describes a framework under which the NRC could assist NAVSEA with the oversight of SSSB decommissioning. Rather than NRC regulation of these activities, NAVSEA is presenting this Notional Framework wherein the NRC would provide support to NAVSEA to facilitate the decommissioning of the SSSB. Under this construct, the NRC would perform the same reviews prior to decommissioning and perform the same inspections and receive reports during and after decommissioning as it would for an unlicensed facility where the NRC is overseeing decommissioning activities. This would also include similar reviews to those that would be performed in cases in which a license transfer to a decommissioning company was being proposed. However, instead of taking any regulatory action with the owner (non-licensee) or decommissioning contractor company, the NRC would provide recommended actions to NAVSEA. NAVSEA, in turn, would take action through its contract with the decommissioning company to implement the NRC recommendations. Key steps in this process would include the following.

1. NAVSEA's contract with the decommissioning contractor company would require that decommissioning contractor company perform SSSB dismantlement and disposal in compliance with all NRC regulations that would apply to an NRC licensee or an unlicensed company whose decommissioning the NRC was overseeing. In the contract, NAVSEA will require that the decommissioning contractor company comply with all NRC requirements. By contract, NAVSEA would also require that the decommissioning contractor company provide the same information and access to the NRC as would be required for an NRC-licensed decommissioning process. However, since there is no licensee, the NRC will prepare a technical evaluation report for the Navy instead of a safety evaluation report.
2. Under contract to NAVSEA, the decommissioning contractor company, in cooperation with NAVSEA, would prepare a Decommissioning Work Plan in accordance with NRC requirements. The Decommissioning Work Plan would be submitted to the NRC for review. Under a to-be-developed Interagency Agreement with NAVSEA, the NRC would conduct the same review as it would for an unlicensed site whose decommissioning was regulated by NRC. Any Requests for Additional Information for the decommissioning contractor company would be provided to NAVSEA, and any additional information submittals would be required to be addressed under NAVSEA's contract with the decommissioning contractor company. If the Decommissioning Work Plan was adequate, as the servicing agency for the Navy, the NRC would prepare a Technical Evaluation Report and a draft EA and draft FONSI, if an EIS was not required to support the Navy's decision on the Decommissioning Work Plan. If the Decommissioning Work Plan was acceptable, the NRC would recommend that the Navy approve the Plan and issue the EA and FONSI or EIS, and NAVSEA would take that action in accordance with the contract.
3. NAVSEA would transfer possession of the SSSB to the decommissioning contractor company. This transfer would only occur after the NRC reviewed a Request for Transfer of Possession. The Request for Transfer of Possession should include the information specified in 10 CFR 30.34(b)(2). Although no license exists to be transferred, the NRC's review would be similar to the type of review performed for a proposed license transfer, including review of the company's technical capabilities and the financial assurances to ensure that the decommissioning contractor company would be able to complete the required SSSB dismantlement and disposal. This NRC review could be done in parallel with the NRC review of the Decommissioning Work Plan. Rather than taking action to approve or disapprove a license transfer, the NRC would make a recommendation to NAVSEA on whether or not to transfer possession of the SSSB to the decommissioning contractor company.
4. If the Decommissioning Work Plan and transfer of the SSSB were recommended by the NRC and authorized by NAVSEA under the contract, the NRC would inspect the progress of the dismantlement and disposal for compliance with NRC regulations in the same manner that the NRC would for a licensed decommissioning process. However, the findings of such inspections would be provided to NAVSEA rather than to the decommissioning contractor company. If corrective actions or penalties were

recommended by the NRC, it would be the responsibility of NAVSEA to take action to require such actions or enforce any penalties.

5. The NRC's reviews and inspections would be performed in accordance with NRC publicly available inspection manual chapters and inspection procedures and would focus on radiological hazards. Non-radiological hazards, including occupational safety and health, RCRA hazardous materials, PCBs, and asbestos containing materials, would be regulated by other State and Federal agencies in the same manner that these hazards are regulated in non-nuclear Navy ship dismantlement and recycling.

6. Following completion of SSSB dismantlement and disposal, the NRC would perform any necessary final inspections, confirmatory surveys, and technical reviews to ensure that all parts of the SSSB were properly disposed of and that the dismantlement site is suitable for unrestricted release. NRC would provide the results of such final reviews in a "Closure" letter with a Technical Evaluation Report to document NRC's closure of our activities in lieu of a license termination letter to NAVSEA. NAVSEA would take any required action prior to contract closeout with the decommissioning contractor company.

Throughout this entire process, it is the intention of both NRC and NAVSEA that SSSB dismantlement and disposal be conducted, as closely as possible, in accordance with NRC regulations. However, in no case would the NRC act directly as a regulator of the decommissioning contractor company, but rather would provide all recommended approvals, recommended disapprovals, requests for additional information, inspection results, and recommended enforcement actions or penalties to NAVSEA. It would be NAVSEA's intent to enforce the NRC's recommended actions by contract, without any addition to or subtraction from, the NRC's recommendations.